

Mobilising Malaysia's US\$728 bil infrastructure opportunity

Imagine Malaysia's infrastructure in 2050 — not as a collection of disconnected assets but as integrated systems. Roads that do more than connect places but open up communities, improve access to jobs and essential services, and strengthen economic corridors. Rail corridors that accommodate transmission lines powering manufacturing facilities and industrial growth. Digital systems are woven through every layer of the economy.

This future is within reach. PwC's Global Infrastructure Outlook 2025-2050 projects that Malaysia's infrastructure spending could reach US\$728 billion cumulatively by 2050 under a baseline scenario, with annual spending rising to US\$31 billion. Closing the gap with higher spending economies could push cumulative investment towards US\$1 trillion and raise annual spending to US\$50 billion.

This includes transport, the largest sector in terms of total spending, accounting for an estimated 41% of total spend until 2050. The other sectors to watch are power, the fastest growing sector in the forecast, with an expected 112% rise in annual spending by 2050, as well as digital infrastructure, with a 154% surge in annual spending until 2027, leading to long-term moderation.

Deployed strategically, that scale of investment can accelerate the country's long-term growth. It can strengthen energy security, support the low-carbon transition, improve climate resilience and enhance trade competitiveness. It can help address structural challenges, from uneven access to digital connectivity to ageing infrastructure that is being replaced more slowly than demand is growing. The benefits extend beyond individual projects — creating jobs, lifting productivity, attracting investment and laying the foundations for sustained economic growth in the decades ahead.

Laying the groundwork for tomorrow

These outcomes are not guaranteed. They depend on the decisions being made today about how infrastructure is prioritised, financed, coordinated and delivered. The message from PwC's Global Infrastructure Outlook is clear: future prosperity will depend not only on how much capital is invested but also on how effectively transport, power and digital infrastructure are planned as interconnected systems. Mobilising capital alone will not guarantee success.

Malaysia currently accounts for approximately 0.9% of Asia-Pacific infrastructure spending, ranking 10th in the region and 28th globally. With infrastructure spending already reaching an estimated 4.8% of gross domestic (GDP) product in 2024, Malaysia is well-positioned to build further momentum towards the 6.6% benchmark observed among higher spending economies over the past two decades. Achieving this benchmark will require an additional US\$19 billion in annual investment but it could also unlock substantial eco-



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nomical returns, including a projected 2.3% increase in GDP by 2050.

But where will this investment come from?

Public funding will remain essential, yet the scale of Malaysia's infrastructure ambitions will require deeper participation from private capital. Well-structured public-private partnerships can help mobilise financing and expertise while blended finance models can improve the viability of projects that deliver broader economic, social or sustainability outcomes. For investors and lenders evaluating where to deploy capital, understanding how infrastructure demand is evolving across sectors and markets will be increasingly important.

A shared agenda for success

Building the country's infrastructure future will require coordination across multiple priorities at once. Logistics quality is currently at 72% compared with the regional average of 75% while renewable energy represents 24% of total installed capacity against a regional average of 54%. Transport systems, energy networks, industrial development and digital infrastructure will need to evolve together if Malaysia is to compete effectively for investment and capture the next wave of regional growth.

Workforce readiness will also play an important role in determining how successfully Malaysia delivers its infrastructure agenda. Technical and vocational education and training (TVET) will be critical in addressing emerging green skills gaps across sectors such as construction and energy. Investing in talent development

today will help ensure that infrastructure ambitions can be matched by delivery capability tomorrow.

Equally important is reimagining how infrastructure is planned, built and operated. As infrastructure systems become increasingly interconnected, digital capabilities will become a key source of competitive advantage. Technologies such as building information modelling, digital twins and generative artificial intelligence have the potential to improve planning, optimise designs, predict risks and enhance project delivery. Organisations that successfully integrate these capabilities into their operations will be better positioned to build resilience and capture long-term value.

Corporates, investors, lenders and governments each have distinct but complementary roles to play. Businesses will need to treat infrastructure as a strategic enabler of growth. Investors will increasingly look beyond individual assets towards platforms and ecosystems capable of delivering scalable returns across markets. Governments will need to provide policy certainty, transparent governance and credible long-term project pipelines that encourage sustained private sector participation.

Malaysia can exceed these forecasts. It can also fall short of them.

The difference will be determined by the choices made today. Ultimately, future generations may inherit more than a collection of roads, power assets or digital networks. They may inherit a connected system that expands opportunity, strengthens resilience and supports long-term prosperity. That is Malaysia's US\$728 billion infrastructure opportunity by 2050. **E**

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